



SAFE/ITUS  
520.43141X00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Koichi OKADA et al.

Serial No.: 10/661,574

Filed: September 15, 2004

For: DATA MIGRATION METHOD FOR DISK APPARATUS

**PETITION TO MAKE SPECIAL  
UNDER 37 CFR 1.102(d) and MPEP. §708.02, VIII**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 22, 2004

Sir:

**1. Petition**

Applicants hereby petition to make this application **Special**, in accordance with 37 CFR §1.102(d) and MPEP 708.02, VIII. The present invention is a new application filed in the United States Patent and Trademark Office on September 15, 2004 and as such has not received any examination by the Examiner.

**2. Claims**

Applicants hereby represent that all the claims in the present application are directed to a single invention. If upon examination it is determined that all the claims presented are not directed to a single invention, Applicants will make an election without traverse as a prerequisite to the granting of special status.

### **3. Search**

Applicants hereby submit that a pre-examination search has been made by a professional searcher, (a copy of which is attached), in the following classes and subclasses:

<u>Class</u>	<u>Subclass</u>
711	112, 114, 165
714	7

### **4. Copy of References**

A listing of all references found by the professional searcher is provided on a Form PTO-1449 and copies of the references and the Form PTO-1449 are submitted as part of an Information Disclosure Statement (IDS) filed on even date.

### **5. Detailed Discussion of the References and Distinctions Between the References and the Claims**

Below is a discussion of the references uncovered by the search and cited in the IDS filed on even date that appear to be most closely related to the subject matter encompassed by the claims of the present application, and which discussion particularly points out how Applicants' claimed subject matter is distinguishable over those references. All other references uncovered by the search and cited in the IDS filed on even date are **not** treated in detail herein.

**a. Detailed Discussion of the References**

**U.S. Patent No. 6,374,327 (Sakaki)** discloses a method, apparatus, and computer program for controlling data migration between an old storage system and a new storage system. When access by the CPU is generated, if the access is to a region where data migration has been completed, then processing of the access is handled by the new storage system. On the other hand, if the access is to a region where data migration has not been completed, then processing of the access is handled by the old storage system, causing data related to the access to be transferred to the new storage system.

**U.S. Patent No. 6,598,134 (Ofek)**, discloses a system of on-line, real-time data migration from an existing storage device to a replacement storage device. The existing and replacement storage devices are coupled, and when a host system makes a data transfer request, the replacement storage device determines whether the data elements have already migrated to the replacement storage device.

**U.S. Patent No. 6,647,476 (Nagasawa)**, discloses a system and method for enabling data migration between old and new subsystems under stopless operation, where a plurality of first access paths and are prepared between a CPU and an old CU (old subsystem) having an old VOL and a plurality of third access paths and are set between the old CU and a new CU (new subsystem) having a new VOL.

**U.S. Patent No. 6,708,232 (Obara)**, discloses a data migration method, protocol converter, and switching apparatus for transferring data from a computer

and existing first storage system using a SCSI interface to a new second storage system using a SAN. The computer is connected by a switch to the second storage system and the first storage system, and data is migrated through the switch to the second storage system.

**US Patent Publication No. 2003/0212854 (Kitamura)**, discloses a computer system in which data is migrated from an old storage subsystem to a new storage subsystem through a fiber channel switch. A back end server is used to control data migration from the old storage subsystem to the new storage subsystem using a data migration unit. The back end server subsequently switches a virtual disk setting causing the virtual disk to correspond to the new storage subsystem.

**European Patent Application No. 1 130 514 A2 (Watanabe)**, discloses a data migration method in which a new disk system is connected to a switch that has already been connected to a host and an old disk system. The new disk system reads the configuration information of the old disk system and, in the switch, the physical port ID of the old disk system and the physical port ID of the new disk system are exchanged.

**b. Distinctions Between the References and the Claims**

The present invention as recited in the claims filed are not taught or suggested by any of the above noted references whether taken individually or in combination with each other or in combination with any of the other references now of record.

The present invention as recited in the claims is directed to controlling an interface command of a disk apparatus of a computer system including one or more host computers, an old disk apparatus connected prior to the host computers, and a new disk apparatus newly connected to the host computers via a switch, including: changing-over and connecting the old disk apparatus to the host computers via the switch being connected to the new disk apparatus and executing data migration from the old disk apparatus to the new disk apparatus via the switch; identifying a command for inquiring disk identification as an interface command from the host computers and a command for inputting and outputting data; and sending the command for inquiring the disk identification to the old disk apparatus.

The above described features of the present invention, particularly changing-over and connecting the old disk apparatus to the host computers via the switch being connected to the new disk apparatus and executing data migration from the old disk apparatus to the new disk apparatus via the switch, identifying a command for inquiring disk identification as an interface command from the host computers and a command for inputting and outputting data, and sending the command for inquiring the disk identification to the old disk apparatus, are not taught or suggested by any of the references of record whether taken individually or in combination with each other.

**6. Fee (37 C.F.R. 1.17(i))**

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

☒ the Credit Card Payment Form (attached) for \$130.00.

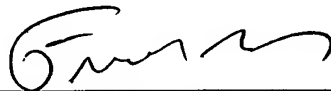
☐ charging Account \_\_\_\_\_ the sum of \$130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly, Stanger & Malur, Deposit Account No. 50-1417 (520.43141x00).

Respectfully submitted,

MATTINGLY, STANGER & MALUR, P.C.



---

Frederick D. Bailey  
Registration No. 42,282

FDB/sdb  
Enclosures